Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

T.J. Labbe Electric Generating Station
Lafayette Utilities System
Lafayette, Lafayette Parish, Louisiana
Agency Interest Number: 119640
Activity Number: PER20060001
Draft Permit 1520-00128-V1

I. APPLICANT:

Company:
Lafayette Utilities System
P.O. Box 4017-C, Lafayette, LA 70502

Facility:
North Generating Station
208 Renaud Dr., Lafayette, Lafayette Parish, Louisiana
Approximate UTM coordinates are 592.004 kilometers East and 3347.485 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

Lafayette Utility Services is an existing 100-megawatt public power generation facility within Lafayette Parish, Louisiana. Lafayette City Parish Consolidated Government owns T J Labbe Electric Generating Station and is operated by Lafayette Utilities System. T J Labbe Electric Generating Station currently operates under Permit No. 1520-00128-V0, issued April 15, 2005.

This is a significant modification to the Part 70 operating permit for the facility.

III. PERMIT / PROJECT INFORMATION:

Permit

A permit application and Emission Inventory Questionnaire were submitted by Lafayette Utilities System/Lafayette Consolidated Government on May 18, 2006 requesting a modification to the Part 70 operating permit. Additional information dated May 29, 2007 was also received.

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Project description

Lafayette Utilities System (LUS) operates a 100 MW power generation facility at a site located within the City of Lafayette corporate limits, zoned for industrial use. This facility includes two simple cycle General Electric LM 6000 combustion turbine and generator sets, two cooling towers, two inlet air chillers, one natural gas interconnection facility, one control house, one demineralized water storage tank, two gas compressors, and two generator step-up transformers. Natural gas, the fuel for the turbines, is provided through an interconnection to existing distribution lines west of the property. The project feeds the LUS electric transmission system via interconnection to transmission lines that traverse the property in the northwestern section. An emergency start-up diesel generator is available in the event of the loss of power from the transmission grid. The two turbine generators will be used to meet peak electricity demand.

T J Labbe Electric Generating Station submitted an initial Clean Air Interstate Rule (CAIR) application dated June 6, 2007 requesting a CAIR permit and an Acid Rain Permit renewal application dated April 4, 2008.

T J Labbe Electric Generating Station proposes the following:

- Update and clarify requirements regarding 40 CFR 60 Subpart GG.
- Update insignificant activities.
- Remove the startup/shut down emissions as a General Condition XVII and include as part of the permitted annual emissions total.

Permitted Air Emissions

The estimated permitted emissions from the new facility in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	16.8	16.8	-
SO_2	7.42	8.25	+0.83
NO_X	241.37	241.37	-
CO	239.11	239.11	-
VOC	27.32	27.32	-

Regulatory Analysis

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, and New Source Performance Standards (NSPS). NESHAP and Prevention of Significant Deterioration do not apply.

This facility will be a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

Louisiana Air Quality Regulations and NSPS

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit.

Turbines U-1 and U-2 shall comply with the applicable portions of New Source Performance Standards (NSPS), 40 CFR 60 Subpart GG- Standards of Performance for Stationary Gas Turbines. Both units subject to 40 CFR 72 and 40 CFR 75.

Prevention of Significant Deterioration Applicability

PSD does not apply.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

IV. PERMIT SHIELDS

A permit shield was not requested.

V. PERIODIC MONITORING

Periodic monitoring is not required.

VI. APPLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS

ID No:	Requirement	Notes
Facility Wide	Chemical Accident Prevention and Minimization of the Consequences (40 CFR 68) (LAC 33:III.Chapter 59)	DOES NOT APPLY. Threshold quantities are not exceeded

VII. STREAMLINED REQUIREMENTS

Unit or Plant Site	Programs Being Streamlined	Stream Applicability	Overall Most Stringent Program
T.J. Labbe Electric Generating Station	None		

Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

CAM - Compliance Assurance Monitoring rule – A federal air regulation under 40 CFR Part 64

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Disulfide (H_2S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

NESHAP - National Emission Standards for Hazardous Air Pollutants – Toxic air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to

ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

NSPS - New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH_4), Ethane (C_2H_6), Carbon Disulfide (CS_2)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: $\geq$ 10 tons per year of any toxic air pollutant; $\geq$ 25 tons of total toxic air pollutants; and $\geq$ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM_{10}- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO_2) – An oxide of sulphur.

TAP - Toxic Air Pollutant (LDEQ acronym for air pollutants regulated under LAC 33 Part III, Chapter 51, Tables 1 through 3

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.